

Near the head of tide in the Kennebec River, however, in Gardiner, there appears another *Bidens*, which has not been found in the lower part of the estuary. The foliage of this plant resembles that of *B. Eatonii*, var. *kennebecensis*, from which it differs conspicuously in its broadly campanulate involucre and shorter and broader achenes. Its affinities seem to lie rather with *B. heterodoxa* of the Gulf of St. Lawrence region and southern Connecticut. This variety is intermediate in its characters between var. *monardaefolia* of Pocotapaug Lake, Connecticut, and var. *orthodoxa* of the Magdalen Islands, Quebec. From the former it may be distinguished by its much shorter involucre bracts, its smaller fruiting heads, and its consistently retrorsely barbed achenes. From the latter it differs in its strictly two-awned achenes, retrorsely barbed along the margins, and its rarely divided leaves.

BIDENS HETERODOXA (Fernald) Fernald & St. John, var. **interstes**, var. nov., planta 2-3 dm. alta; foliis simplicibus vel rare nonnihil 3-partitis grosse serratis petiolatis, petiolis anguste alatis 1-3 cm. longis; capitulis terminalibus 1-1.3 cm. latis; bracteis exterioribus erectis 1.3-2 cm. longis; achaeniis $5.7-7 \times 1.8-2.2$ mm. strigosis marginibus retrorse setosis, aristis 2 retrorse setosis.

Plant 2-3 dm. tall: leaves simple or rarely somewhat 3-cleft, coarsely serrate, on narrowly winged petioles 1-3 cm. long: terminal heads 1-1.3 cm. wide: outer involucre bracts ascending, 1.3-2 cm. long: achenes $5.7-7.0 \times 1.8-2.2$ mm., strigose, retrorsely barbed on the margins; awns 2, retrorsely barbed.—MAINE: at high-tide level along the shores of the Kennebec River, $\frac{1}{2}$ mile below Gardiner, Sept. 18, 1923, *N. C. Fassett*, no. 852 (TPYE in Gray Herb.); tidal shores, Kennebec River, Hatchs Corners, Dresden, Sept. 9, 1924, *N. C. Fassett*, no. 2101.

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FLOWERING DATES FOR *AMELANCHIER BARTRAMIANA*.—After considerable experience in collecting other species of *Amelanchier* in blossom, I began to think it would be necessary to climb a mountain some spring in order to find *A. Bartramiana* in the right condition. It was accordingly a pleasant surprise to me, when driving through Warren, New Hampshire, May 22, 1923, to spy over in the swamp a bush of this characteristic species with white star-like flowers, quite different from *A. laevis*, which was everywhere in the woods and by the roadsides.

The inflorescence consists of two or three flowers coming from a single axil the pedicels sometimes branching. The leaves at this season often have the same reddish tinge which characterizes *A. laevis* and *A. sanguinea*, but the general effect of the shrub, with its snow-white star-shaped flowers, is very different. It is frequently a dense shrub, seldom very tall.

Later the same week I found *A. Bartramiana* in bloom in Barton, Vermont, and still later, May 27, in Brome County, Quebec, rather past its prime. This year I was again much pleased and surprised to find it in bloom on the high sandplains between Ashburnham and Winchendon, Massachusetts, at an elevation of perhaps 1200 feet, on May 21. Crossing the State line, I found it again in Fitzwilliam, New Hampshire, at about the same elevation, and later that week in Marlow, Lempster and Grantham, along the west side highway of New Hampshire.

It is interesting to know that this species, so often associated with mountains and the northern country, is abundant at moderate elevations so far south as these stations. In summer the leaf is always characteristic. The fruit is somewhat pyriform, one to three fruits on long pedicels ripening at the upper axils. I have usually found it after the middle of July.—CLARENCE H. KNOWLTON, Hingham, Massachusetts.

A FLORA OF SPRINGFIELD, MASSACHUSETTS.—The results of active collecting by the botanists of Springfield, Massachusetts, during the last half-century have been published¹ by the Springfield Museum of Natural History. The actual drawing together of the material was chiefly in the hands of the late Luman Andrews, who unfortunately died before the work could be put into final form; and the finishing touches were given the manuscript by the experienced student of the flora of the Connecticut Valley, Mr. C. A. Weatherby. The Catalogue is in conventional and, therefore, thoroughly convenient form. It is accompanied by a detailed map and by ten plates, illustrating noteworthy trees. The native flora of Springfield has naturally suffered the fate of indigenous floras about any large city and the

¹ Museum of Natural History, Springfield, Massachusetts, Bulletin No. 3. *Catalogue of the Flowering Plants and Ferns of Springfield, Massachusetts.* By Luman Andrews and a Committee of the Springfield Botanical Society. 1924.